

Serial No. 09/764,679

Docket No. 1232-4673

Amendment and Response dated February 21, 2006
In Response to the Office Action dated November 21, 2005

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-3. (Cancelled).

4. (Currently Amended) A projecting apparatus having:

a reflection type light modulating element for modulating light by diffraction, deflection or scattering;

a scanning optical system for selectively reflecting a first beam incident into a reflection area of said scanning optical system, scanning a plane to be projected with the reflected first beam, and transmitting a second beam incident into a transmission area of said scanning optical system; and

an illuminating optical system including a lens system, for illuminating said reflection type light modulating element with illumination light from a light source,

wherein said illuminating optical system illuminates said reflection type light modulating optical element with light which has transmitted through the transmission area of said light scanning optical system, and

wherein a reflection type light modulating element side of said lens system is telecentric, and

wherein the reflection area includes two of reflection portions, and the transmission area is located between two of the reflection portions.

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5. (Canceled).

6. (Canceled)

7. (Canceled)

8. (Previously Presented) A projecting apparatus according to claim 4, wherein said light modulating element has an elongate light modulating area in which a plurality of light modulating portions corresponding to pixels are arranged in a certain direction, and said illuminating optical system has one or more anamorphic optical elements for illuminating said light modulating element with a light elongate in the direction of arrangement of said plurality of light modulating portions.

9. (Original) A projecting apparatus according to claim 8, wherein said scanning optical system scans the beam from said light modulating element only in a direction orthogonal to the lengthwise direction of said light modulating area.

10. (Original) A projecting apparatus according to claim 9, wherein said light modulating element has a light modulating area in which a plurality of light modulating portions are arranged also in the direction orthogonal to said lengthwise direction.

11. (Original) A projecting apparatus according to claim 8, wherein said scanning optical system scans the light from said light modulating element in the lengthwise direction of said light modulating area and a direction orthogonal to said lengthwise direction.

12-16. (Canceled)

17. (Canceled).

18. (Currently Amended) An image display apparatus for projecting an image onto a display plane, comprising:

a light modulating element which changes, in a predetermined plane, an emerging direction of an emerging light emerged from the light modulating element on the

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basis of an image signal; and

a scanning mirror which has a reflection area for reflecting a part of the emerging light and scanning the display plane with the part of the emerging light, and a transmission area for transmitting another part of the emerging light, and which rotates about an axis perpendicular to the predetermined plane,

wherein a direction along which the part of the emerging light emerges from the light modulating element is different from a direction along which the another part of the emerging light emerges from the light modulating element.

19. (Previously Presented) An optical scanning apparatus according to claim 18, wherein the light modulating element is capable of changing the emerged direction of light emerged from the light modulating element by a diffraction, polarization, or scattering, and further capable of stopping affects of the diffraction, polarization or scattering.

20. (Previously Presented) An optical scanning apparatus according to claim 18, further comprising an illumination optical system which guides light from a light source to the light modulating element, and a projection optical system which projects light from the scanning optical system onto the display plane.

21. (Currently Amended) An image display apparatus ~~for projecting an image onto a display plane,~~ comprising:

a light modulating element capable of changing ~~which changes~~ an emerging direction of ~~an~~ emerging light emerged from the light modulating element ~~on the basis of an image signal;~~ and

a scanning optical system having ~~which~~ has a reflection area which reflects and scans ~~an~~ emerged light emerged from the light modulating element ~~for reflecting a part of the~~

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emerging light as an image light and scanning the display plane with the part of the emerging light, and a transmission area which transmits light emerged which is not the image light in a direction different from that of the image light for transmitting another part of the emerging light as an non-image light,

wherein a direction along which the part of the emerging light emerges from the light modulating element is different from a direction along which the another part of the emerging light emerges from the light modulating element.

22. (Currently Amended) An image display apparatus according to claim 21, further comprising: a projection optical system which projects the image light on the display plane on a surface to be scanned the image light reflected and scanned by the scanning optical system.

23. (Currently Amended) An image display apparatus according to claim 22, wherein the another part of the emerging light is substantively incident into the projection optical system light which is not the image light is practically made incident into the projection optical system.

24. (Previously Presented) An image display apparatus according to claim 21, wherein the light modulating element is capable of changing the emerged direction of light emerged from the light modulating element by a diffraction, polarization, or scattering, and further capable of stopping affects of the diffraction, polarization or scattering.

25. (Previously Presented) An image display apparatus according to claim 21, further comprising an illumination optical system which guides light from a light source to the light modulating element, and

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wherein the illumination optical system guides the light from the light source to the optical modulating element through the transmission area.

26. (New) An image display apparatus for projecting an image onto a display plane, comprising:

a light modulating element which changes, in a predetermined plane, an emerging direction of an emerging light emerged from the light modulating element on the basis of an image signal;

a scanning optical system which has a reflection area for reflecting a part of the emerging light as an image light and scanning the display plane with the part of the emerging light, and a transmission area for transmitting another part of the emerging light, and which rotates about an axis perpendicular to the predetermined plane, wherein the reflection area includes two of reflection portions, and the transmission area is located between tow of the reflection portions;

an illuminating optical system which illuminates the light modulating element with illumination light from a light source, by transmitting the illumination light through the transmission area without passing through the reflection area;

a stop located near the scanning optical system; and

a projection optical system which projects the image light on the display plane,

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wherein a direction along which the part of the emerging light emerges from the light modulating element is different from a direction along which the another part of the emerging light emerges from the light modulating element, and

the another par of the emerging light is not substantially incident into the projection optical system.